

METHOD AND APPARATUS TO DECREASE  
COMBUSTOR EMISSIONS

ABSTRACT OF THE DISCLOSURE

A method for operating a gas turbine engine facilitates reducing an amount of emissions from a combustor. The combustor includes a mixer assembly including a pilot mixer, a main mixer, and a centerbody that extends therebetween. The pilot mixer includes a pilot fuel nozzle and a plurality of axial swirlers. The main mixer includes a main swirler and a plurality of fuel injection ports. The method comprises injecting fuel into the combustor through the pilot mixer, such that the fuel is discharged downstream from the pilot mixer axial swirlers, and directing flow exiting the pilot mixer with a lip extending from the centerbody into a pilot flame zone downstream from said pilot mixer.

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